

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
2 October 2003 (02.10.2003)

PCT

(10) International Publication Number
WO 03/080339 A1

(51) International Patent Classification⁷: **B32B 33/00**,
B65D 83/04

(21) International Application Number: PCT/US03/06094

(22) International Filing Date: 27 February 2003 (27.02.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
10/100,610 18 March 2002 (18.03.2002) US

(71) Applicant: **STICKY BUSINESS LLC** [US/US]; 150
Round Hill Road, Rosalyn Heights, NY 11577 (US).

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

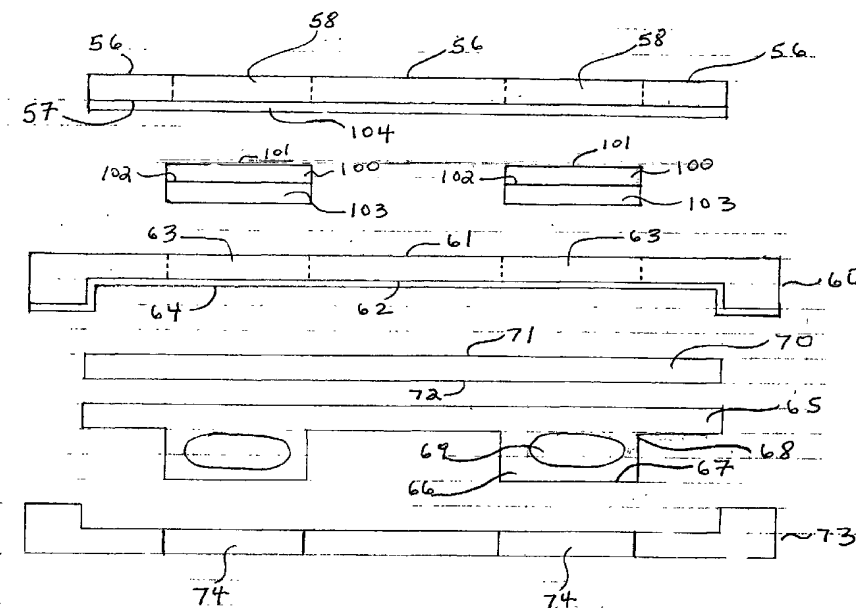
— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(72) Inventor: **BOLNICK, Richard**; 125 Gassa Boulevard,
Farmingdale, NY 11735 (US).

(74) Agent: **TSAVARIS, John, E., II**; Kenyon & Kenyon, One
Broadway, New York, NY 10004 (US).

(54) Title: CHILD RESISTANT SENIOR FRIENDLY MEDICAMENT LABEL



(57) Abstract: A blister card label form has a first sheet (55) and a second sheet (60) each having first and second major surfaces. A film material (100) is disposed between the first sheet and the second sheet. The first sheet is provided with removable portions (58) and a permanent adhesive (104) on its second major surface. The film material is provided with a temporary adhesive (103) on its second major surface which permits portions of the first sheet to be selectively removed without removing portions (63) of the second sheet.



WO 03/080339 A1

CHILD RESISTANT SENIOR
FRIENDLY MEDICAMENT LABEL

FIELD OF THE INVENTION

The present invention relates to label forms for blister cards and more particularly to label forms for blister cards that are child resistant and senior friendly.

BACKGROUND

Conventional blister cards often utilize a retaining label, such as paper, or foil, to retain a medicament in the medicament compartment or "blister" of a blister card. When the user wishes to use the medicament, the medicament is pushed through the retaining label. One shortcoming of this conventional blister card packaging is that a child may tamper with the package and release the medicament. One approach to making conventional blister cards resistant to tampering by children is to increase the thickness of the label so that more strength is required to push the medicament through the sheet. Another approach is to vary the composition of the material utilized to make the sheet so that the sheet is more resistant to puncture. Still another approach is to utilize multiple sheets so that it is more difficult for a child to push the medicament through the retaining sheet. One major shortcoming of all of these approaches is that they are not senior friendly, i.e., as the blister card becomes more resistant to tampering by children, it becomes more difficult for the elderly or the infirm to remove the medicament when needed. This is especially important for patients with arthritis or patients who may have the use of only one hand. Accordingly, there exists a need for a blister card that is both resistant to tampering by children and that will also permit a senior to easily release the medicament from the blister card when needed.

SUMMARY OF THE INVENTION

In accordance with an exemplary embodiment of the present invention, it is an object of this invention to provide a child resistant/senior friendly blister card, comprising a first sheet having a first major surface and a second major surface and a plurality of selectively removable portions. The second major surface provided with a temporary adhesive, a second sheet has a first major surface and a second major surface and a plurality of removable portions. The first major surface of the second sheet is attached to the second major surface of the first sheet. The second major surface of the second sheet provided with a permanent adhesive. A blister card has a plurality of medicament compartments with each of the plurality of compartments having a closed bottom end and an open top end for receiving a medicament. A medicament containment sheet has a first major surface and a second major surface, and the second major surface of the containment sheet is attached to the blister card. The first major surface of the containment sheet is attached to the permanent adhesive on the second major surface of the second sheet. The removable portions of the first sheet are in registry with the open top ends of the medicament compartments. The temporary adhesive on the second major surface of the first sheet has an adhesive strength that is sufficient to adhere the first sheet to the first major surface of the second sheet and an adhesive strength that allows the selectively removable portions of the first sheet to be removed from the second sheet without removing the selectively removable portions of the second sheet to which the first sheet is attached.

It is another object of this invention to provide a child resistant/senior friendly blister card, comprising a child resistant/senior friendly blister card, comprising a first sheet having a first major surface and a second major surface and a plurality of selectively removable portions. The second major surface is provided with a temporary adhesive. A second

sheet has a first major surface and a second major surface and provided with a plurality of apertures, the first major surface of the second sheet is attached to the second major surface of the first sheet and the second major surface of the second sheet provided with a permanent adhesive. A blister card has a plurality of medicament compartments with each of the plurality of compartments having a closed bottom end and an open top end for receiving a medicament. A medicament containment sheet has a first major surface and a second major surface. The second major surface of the containment sheet is attached to the blister card and the first major surface of the containment sheet is attached to the permanent adhesive on the second major surface of the second sheet. The removable portions of the first sheet are in registry with the open top ends of the medicament compartments and also in registry with the apertures in the second sheet. The temporary adhesive on the second major surface of the first sheet has an adhesive strength that is sufficient to adhere the first sheet to the first major surface of the second sheet and adhere the first sheet to the first major surface of the medicament containment sheet, and an adhesive strength that allows the selectively removable portions in the first sheet to be removed without removing the portions of the medicament containment sheet covering the open top end of the medicament compartment to which the first sheet is attached.

BRIEF DESCRIPTION OF THE DRAWINGS

Figure 1 shows a conventional blister card containing a medicament;

Figure 2 shows the medicament shown in Figure 1 being dispensed;

Figure 3 is an exploded view of a label form constructed in accordance with the invention;

Figure 4 shows a major surface of a first sheet constructed in accordance with the invention;

Figure 5 shows a major surface of a second sheet constructed in accordance with the invention;

Figure 6 shows the second sheet of Figure 5 superimposed on the first sheet of Figure 4;

Figure 7 shows the exploded view of the label form of Figure 3 in the assembled configuration;

Figure 8 shows the first major surface of a first sheet constructed in accordance with the invention;

Figure 9 shows a label form and blister card constructed in accordance with the invention;

Figure 10 shows the label form of Figure 9 with a removable portion removed;

Figure 11 shows how the medicament shown in Figure 10 is dispensed;

Figure 12 is a top view of another embodiment of the invention;

Figure 13 is a side view of the invention shown in Figure 12 applied to a blister card;

Figure 14 is an exploded view of an alternative embodiment of a child resistant blister card constructed in accordance with Applicant's invention;

Figure 15 shows the components of Figure 14 after they have been assembled;

Figure 16 shows a medicament being dispensed from the blister card of Figure 15;

Figure 17 is an exploded view of an alternative embodiment of a child resistant blister card constructed in accordance with Applicant's invention;

Figure 18 shows the components of Figure 17 after they have been assembled;

Figure 19 shows a medicament being dispensed from the blister card of Figure 18;

Figure 20 shows an alternative embodiment of the invention shown in Figure 14; and

Figure 21 shows an alternate embodiment of the invention shown in Figure 17.

DETAILED DESCRIPTION OF THE INVENTION

Figure 1 is a side view of a conventional blister card package 1. The blister card 1 is provided with a plurality of medicament compartments, or pockets 2, having a closed bottom end 3 and an open top end 4 for receiving and storing a medicament 5. A medicament retaining sheet 6 is permanently attached to the blister card 1 and covers the open top end 4 of the medicament compartment 2 so that the medicament 5 is retained in the medicament compartment until required. When the user desires to dispense the medicament 5, the retaining sheet 6 is either cut or punctured to release the medicament 5. This is often accomplished by simply using a thumb or finger to apply pressure to the closed bottom end 3 of the medicament compartment 2 and pushing the medicament 5 through the retaining sheet 6 as shown in Figure 2. The thickness of the retaining sheet 6 and the material utilized to make the retaining sheet 6 may be varied to vary the degree of pressure

or strength required to puncture the retaining sheet.

Figure 3 is an exploded view of a label form 7 for a child resistant/senior friendly blister card constructed in accordance with the invention and shows a first sheet 8, a second sheet 9, and a carrying sheet 10.

The first sheet 8 has a first major surface 11 and a second major surface 12. The first sheet 8 is preferably comprised of paper or a synthetic material. A permanent adhesive 13 is attached to the second major surface 12 of the first sheet 8. Figure 4 is a view of the second major surface 12 of the first sheet 8 and shows that the first sheet 8 has a first length L_1 and a first width W_1 defining a first area A_1 . Figure 8 shows the first major surface 11 of the first sheet 8 and shows that the first sheet 8 is provided with a plurality of removable portions 14 that are selectively removable. Facilitation notches 15 may be provided to facilitate the selective removal of the removable portions 14. Perforations, cuts, or scoring 16 may also be provided in the first sheet 8 to facilitate the removal of each of the removable portions 14.

As shown in Figure 3, the second sheet 9 has a first major surface 17 and a second major surface 18. The second sheet 9 is preferably comprised of a synthetic material. A removable or temporary adhesive 19 is applied to the second major surface 18 of the second sheet 9. Figure 5 is a view of the second major surface 18 of the second sheet 9 and shows that the second sheet 9 has a second length L_2 and a second width W_2 defining a second area A_2 that is smaller than A_1 .

As shown in Figure 3, the carrying sheet 10 has a first major surface 20 and a second major surface 21. The first major surface 20 of the carrying sheet 10 is provided with a non-stick surface 22. In a preferred embodiment, the non-stick coating is silicone.

Figure 7 shows the exploded label set of Figure 3 as it appears when assembled. When assembled, the first major surface 17 of the second sheet 9 is attached to the permanent adhesive 13 on the second surface 12 of the first sheet 8. The removable adhesive 19 disposed on the second major surface 18 of the second sheet 9 is attached to the non-stick surface 22 disposed on the first major surface 20 of the carrying sheet 10. The second sheet 9 is disposed within A_1 of the first sheet 8 so that a portion of the permanent adhesive 13 on the second major surface 12 of the first sheet borders or surrounds the second sheet 9 as shown in Figure 6. The removable portions 14 of the first sheet 8 are disposed within the second area A_2 defined by L_2 and W_2 of the second sheet as shown in Figure 8.

In operation, the label form shown in Figure 7 is removed from the carrying sheet 10 and is applied to a blister card 1 as shown in Figure 9.

Figure 9 shows a blister card 1 containing a medicament 5. The medicament 5 is held in place by a medicament retaining sheet 6. The label form is removed from the carrying sheet 10 and is attached to the medicament retaining sheet 6. The portion of the permanent adhesive 13 that surrounds the second sheet 9 permanently adheres the label form to the medicament retaining sheet 6. The removable portions 14 of the first sheet 8 are in registry with the medicament compartments 2 of the blister card 1. When the label form is applied to the blister card 1 the blister card 1 is resistant to tampering by children because the medicament retaining sheet 6, the second sheet 9, and the first sheet 8 cooperate to provide greater resistance to a child attempting to push the medicament 5 through the three layers 8, 9, and 6. Although resistant to tampering by children, the blister card 1 is also senior friendly because an adult would first remove the removable portion 14 of the first sheet 8 as shown in Figure 10. Removing the removable portion 14 of the first

sheet 8 also removes the portion of the second sheet 9 that is permanently attached to the permanent adhesive 13 on the second major surface 12 of the first sheet 8. Thus, only the medicament retaining sheet 6 prevents the medicament 5 from being removed from the medicament compartment 2 as shown in Figure 10. The user then pushes the medicament 5 through the medicament retaining sheet 6 as shown in Figure 11 and as previously discussed.

In the embodiment shown in Figures 11 and 12, the second sheet is not a continuous sheet as disclosed in Figures 3 to 11. Instead, a plurality of discrete second sheets 9' are disposed as discrete portions or strips. This permits the portions 13' of the permanent adhesive 13 attached to the first sheet 8, and disposed between the plurality of second sheets 9', and thus disposed between the removable portions 14 of the first sheet 8, to come in direct contact with and permanently adhere to the medicament retaining sheet 6 permanently attached to the blister card 1 as shown in Figure 12.

The permanent adhesive 13' disposed between the second sheets 19' has the effect of isolating each removable label 14 so that pulling on the tab of each label will remove only one label at a time. In addition, in this embodiment each removable portion 14 is provided with a tab 50 to facilitate selective removal of each of the removable portions 14. Each removable portion 14 may also be provided with means, e.g., perforations 51 and/or slits 52 cut into the removable portion 14 to facilitate selective removal of each removable portion 14 and to help isolate each removable portion 14 to permit selective removal of each removable portion 14 without inadvertently removing any other removable portion 14.

Figure 12 shows a blister card 1 containing a medicament 5. The medicament 5 is held in place by a medicament retaining sheet 6. The label form is removed from the carrying sheet 10 and is attached to the medicament retaining

sheet 6. The portion of the permanent adhesive 13 that surrounds or borders the first sheet permanently adheres the border of the label form to the medicament retaining sheet 6. The removable portions 14 of the first sheet 8 are in registry with the medicament compartments 2 of the blister card 1. Each of the plurality of second sheets 9' is in registry with the removable portions 14 of the first sheet 8. When the label form is applied to the blister card 1, the blister card 1 is resistant to tampering by children because the medicament retaining sheet 6, the second sheets 9', and the first sheet 8 cooperate to provide greater resistance to a child attempting to push the medicament 5 through the three layers 8, 9', and 6. Although resistant to tampering by children, the blister card 1 is also senior friendly because an adult would first remove the removable portion 14 of the first sheet 8 as shown in Figure 10. Removing the removable portion 14 of the first sheet 8 also removes the portions of the second sheets 9' that are permanently attached to the permanent adhesive 13 on the second major surface 12 of the first sheet 8. Thus, only the medicament retaining sheet 6 prevents the medicament 5 from being removed from the medicament compartment 2 as shown in Figure 10 and as previously discussed. The user then pushes the medicament 5 through the medicament retaining sheet 6 as shown in Figure 11 and as previously discussed.

Figures 14 to 16 show another embodiment of Applicant's invention. Figure 14 is an exploded view of a child resistant/senior friendly blister card, comprising a first sheet 55 having a first major surface 56 and a second major surface 57 and a plurality of selectively removable portions 58. The second major surface 57 is provided with a temporary adhesive 59. A second sheet 60 has a first major surface 61 and a second major surface 62 and a plurality of removable portions 63. The first major surface 61 of the second sheet 60 is attached to the second major surface 57 of the first sheet 55. The second major surface 62 of the second sheet 60 is provided with a permanent adhesive 64. A blister package 65 has a plurality of medicament compartments 66 with each of the

plurality of compartments 66 having a closed bottom end 67 and an open top end 68 for receiving a medicament 69. A medicament containment sheet 70 has a first major surface 71 and a second major surface 72. The second major surface 72 of the containment sheet 70 is attached to the blister card 65 and the first major surface 71 of the containment sheet 70 is attached to the permanent adhesive 64 on the second major surface 62 of the second sheet 60. The removable portions 58 of the first sheet 55 are in registry with the open top ends 68 of the medicament compartments 66. The temporary adhesive 59 on the second major surface 57 of the first sheet 55 has an adhesive strength that is sufficient to adhere the first sheet 55 to the first major surface 61 of the second sheet 60 and an adhesive strength that allows the selectively removable portions 58 of the first sheet 55 to be removed from the second sheet 60 without removing the selectively removable portions 63 of the second sheet 60 to which the first sheet 55 is attached.

In a preferred embodiment, a third sheet 73 may be provided to impart stability. The third sheet 73 is provided with a plurality of apertures 74 sized and aligned to receive the medicament compartments 66. The second sheet 60 and third sheet 73 may be two separate sheets as shown in Figure 14. Alternatively, the second sheet 60 and the third sheet 73 may be hingedly connected in a clam shell configuration. Figure 15 shows the components of Figure 15 after they have been assembled. Figure 16 shows a medicament being dispensed from the assembled blister card of Figure 15.

In a preferred embodiment, the first sheet is comprised of paper or a synthetic material. The second sheet is preferably a synthetic material. The blister card may also be provided with means to facilitate selective removal of the removable portions of the first sheet (e.g., a tab attached to each removable portion). In a preferred embodiment the means is selected from the group consisting of slits, notches, and perforations. The medicament containing sheet may be transparent or opaque and in a preferred embodiment is

comprised of a metal foil.

Figures 17 to 19 to show yet another embodiment of a child resistant/senior friendly blister card constructed in accordance with the invention. Figure 17 is an exploded view and shows a first sheet 80 having a first major surface 81 and a second major surface 82 and a plurality of selectively removable portions 83. The second major surface 82 is provided with a temporary adhesive 84. A second sheet 85 has a first major surface 86 and a second major surface 87 and is provided with a plurality of apertures 88. The first major surface 86 of the second sheet 85 is attached to the second major surface 82 of the first sheet 80. The second major surface 87 of the second sheet 85 is provided with a permanent adhesive 99. A blister package 89 has a plurality of medicament compartments 90 with each of the plurality of compartments 90 having a closed bottom end 91 and an open top end 92 for receiving a medicament 93. A medicament containment sheet 94 has a first major surface 95 and a second major surface 96. The second major surface 96 of the containment sheet 94 is attached to the blister card 89 and the first major surface 95 of the containment sheet 94 is attached to the permanent adhesive 99 on the second major surface 87 of the second sheet 85. The removable portions 83 of the first sheet 80 are in registry with the open top ends 92 of the medicament compartments 90 and are also in registry with the apertures 88 in the second sheet 85. The temporary adhesive 84 on the second major surface 82 of the first sheet 80 has an adhesive strength that is sufficient to adhere the first sheet 80 to the first major surface 86 of the second sheet 85 and adhere the first sheet 80 to the first major surface 95 of the medicament containment sheet 94, and an adhesive strength that allows the selectively removable portions 83 in the first sheet 80 to be removed without removing the portions of the medicament containment sheet 94 covering the open top end 92 of the medicament compartment 90 to which the first sheet 80 is attached. In a preferred embodiment, a third sheet 97 may be provided to impart stability. The third sheet 97 is

provided with a plurality of apertures 98 sized and aligned to receive the medicament compartments 90. The second sheet 85 and third sheet 97 may be two separate sheets as shown in Figure 17. Alternatively, the second sheet 85 and the third sheet 97 may be hingedly connected in a clam shell configuration. Figure 18 shows the components of Figure 17 after they have been assembled. Figure 19 shows a medicament 93 being dispensed from the assembled blister card of Figure 18.

In a preferred embodiment, the first sheet is comprised of paper or a synthetic material. The second sheet is preferably a synthetic material. The blister card may also be provided with means to facilitate selective removal of the removable portions of the first sheet (e.g., a tab attached to each removable portion). In a preferred embodiment the means is selected from the group consisting of slits, notches, and perforations. The medicament containing sheet may be transparent or opaque and in a preferred embodiment is comprised of a metal foil.

Figure 20 shows an especially preferred alternative embodiment of the embodiment shown in Figure 14 in which a film material 100, preferably clear, is disposed between the first sheet 55 and the second sheet 60. The film material 100, preferably a clear sheet, has a first major surface 101 and a second major surface 102. A removable adhesive 103 is applied to the second major surface 102 of the film material 100. In this embodiment, the second major surface 57 of the first sheet 55 is provided with a permanent adhesive 104.

Figure 20 is an exploded view of a child resistant/senior friendly blister card, comprising a first sheet 55 having a first major surface 56 and a second major surface 57 and a plurality of selectively removable portions 58. The second major surface 57 is provided with a permanent adhesive 104. A second sheet 60 has a first major surface 61 and a second major surface 62 and a plurality of removable portions 63. A film material 100 is disposed between the first sheet 55 and the second sheet 60. The film material 100, preferably a

clear sheet, has a first major surface 101 and a second major surface 102. A removable adhesive 103 is applied to the second major surface 102 of the film material 100. In a preferred embodiment the film material 100 does not cover the entire second major surface 57 of the first sheet 55. In an especially preferred embodiment, the first and second major surfaces 101 and 102 of the film material 100 have an area that is smaller than the area of the second major surface 57 of the first sheet 55 and the sheet material 100 is sized and disposed so as to leave a border of uncovered permanent adhesive 104 around the border of the second major surface 57 of the first sheet 55. This permits a portion of the first sheet 55 to be permanently adhered to the first major surface 61 of the second sheet 60.

The first major surface 61 of the second sheet 60 is attached to the second major surface 102 of the film material 100. The second major surface 62 of the second sheet 60 is provided with a permanent adhesive 64. A blister package 65 has a plurality of medicament compartments 66 with each of the plurality of compartments 66 having a closed bottom end 67 and an open top end 68 for receiving a medicament 69. A medicament containment sheet 70 has a first major surface 71 and a second major surface 72. The second major surface 72 of the containment sheet 70 is attached to the blister card 65 and the first major surface 71 of the containment sheet 70 is attached to the permanent adhesive 64 on the second major surface 62 of the second sheet 60. The removable portions 58 of the first sheet 55 are in registry with the open top ends 68 of the medicament compartments 66. The temporary or removable adhesive 103 on the second major surface 102 of the film material 100 has an adhesive strength that is sufficient to adhere the first sheet 55 to the first major surface 61 of the second sheet 60 and an adhesive strength that allows the selectively removable portions 58 of the first sheet 55 to be removed from the second sheet 60 without removing the selectively removable portions 63 of the second sheet 60 to which the first sheet 55 is attached.

In a preferred embodiment, a third sheet 73 may be provided to impart stability. The third sheet 73 is provided with a plurality of apertures 74 sized and aligned to receive the medicament compartments 66. The second sheet 60 and third sheet 73 may be two separate sheets as shown in Figure 14. Alternatively, the second sheet 60 and the third sheet 73 may be hingedly connected in a clam shell configuration.

In a preferred embodiment, the first sheet is comprised of paper or a synthetic material. The second sheet is preferably a synthetic material. The blister card may also be provided with means to facilitate selective removal of the removable portions of the first sheet (e.g., a tab attached to each removable portion). In a preferred embodiment the means is selected from the group consisting of slits, notches, and perforations. The medicament containing sheet may be transparent or opaque and in a preferred embodiment is comprised of a metal foil.

Figure 21 shows another especially preferred alternative embodiment of the embodiment shown in Figure 17 in which a film material 100, preferably clear, is disposed between the first sheet and the second sheet. The film material 100, preferably a clear sheet, has a first major surface 101 and a second major surface 102. A removable adhesive 103 is applied to the second major surface 102 of the film material 100. In this embodiment, the second major surface 82 of the first sheet 80 is provided with a permanent adhesive 105.

Figure 21 is an exploded view and shows a first sheet 80 having a first major surface 81 and a second major surface 82 and a plurality of selectively removable portions 83. The second major surface 82 is provided with a permanent adhesive 105. A second sheet 85 has a first major surface 86 and a second major surface 87 and is provided with a plurality of apertures 88. A film material 100, preferably clear, is disposed between the first sheet 80 and the second sheet 85. The film material 100, preferably a clear sheet, has a first major surface 101 and a second major surface 102. A removable or temporary adhesive 103 is applied to the second major

surface 102 of the film material 100. In a preferred embodiment the film material 100 does not cover the entire second major surface 82 of the first sheet 80. In an especially preferred embodiment, the first and second major surfaces 101 and 102 of the film material 100 have an area that is smaller than the area of the second major surface 82 of the first sheet 80 and the sheet material 100 is sized and disposed so as to leave a border of uncovered permanent adhesive 104 around the border of the second major surface 82 of the first sheet 80. This permits a portion of the first sheet 80 to be permanently adhered to the first major surface 86 of the second sheet 85.

The first major surface 86 of the second sheet 85 is attached to the second major surface 102 of the film material 100. The first major surface 86 of the second sheet 85 is attached to the second major surface 82 of the first sheet 80. The second major surface 87 of the second sheet 85 is provided with a permanent adhesive 99. A blister package 89 has a plurality of medicament compartments 90 with each of the plurality of compartments 90 having a closed bottom end 91 and an open top end 92 for receiving a medicament 93. A medicament containment sheet 94 has a first major surface 95 and a second major surface 96. The second major surface 96 of the containment sheet 94 is attached to the blister card 89 and the first major surface 95 of the containment sheet 94 is attached to the permanent adhesive 99 on the second major surface 87 of the second sheet 85. The removable portions 83 of the first sheet 80 are in registry with the open top ends 92 of the medicament compartments 90 and are also in registry with the apertures 88 in the second sheet 85. The temporary or removable adhesive 103 on the second major surface 102 of the film material 100 has an adhesive strength that is sufficient to adhere the first sheet 80 to the first major surface 86 of the second sheet 85 and adhere the first sheet 80 to the first major surface 95 of the medicament containment sheet 94, and an adhesive strength that allows the selectively removable portions 83 in the first sheet 80 to be removed

without removing the portions of the medicament containment sheet 94 covering the open top end 92 of the medicament compartment 90 to which the first sheet 80 is attached. In a preferred embodiment, a third sheet 97 may be provided to impart stability. The third sheet 97 is provided with a plurality of apertures 98 sized and aligned to receive the medicament compartments 90. The second sheet 85 and third sheet 97 may be two separate sheets or, alternatively, the second sheet 85 and the third sheet 97 may be hingedly connected in a clam shell configuration as previously discussed.

In a preferred embodiment, the first sheet is comprised of paper or a synthetic material. The second sheet is preferably a synthetic material. The blister card may also be provided with means to facilitate selective removal of the removable portions of the first sheet (e.g., a tab attached to each removable portion). In a preferred embodiment the means is selected from the group consisting of slits, notches, and perforations. The medicament containing sheet may be transparent or opaque and in a preferred embodiment is comprised of a metal foil.

What Is Claimed Is:

1. A child resistant/senior friendly blister card, comprising:

(a) a first sheet having a first major surface and a second major surface and a plurality of selectively removable portions, the second major surface provided with a temporary adhesive;

(b) a second sheet having a first major surface and a second major surface and a plurality of removable portions, the first major surface of the second sheet attached to the second major surface of the first sheet, the second major surface of the second sheet provided with a permanent adhesive;

(c) a blister card having a plurality of medicament compartments, each of the plurality of compartments having a closed bottom end and an open top end for receiving a medicament;

(d) a medicament containment sheet having a first major surface and a second major surface, the second major surface of the containment sheet attached to the blister card and the first major surface of the containment sheet attached to the permanent adhesive on the second major surface of the second sheet; and

(e) wherein the removable portions of the first sheet are in registry with the open top ends of the medicament compartments, and wherein the temporary adhesive on the second major surface of the first sheet has an adhesive strength that is sufficient to adhere the first sheet to the first major surface of the second sheet and an adhesive strength that allows the selectively removable portions of the first sheet to be removed from the second sheet without removing the selectively removable portions of the second sheet to which the first sheet is attached.

2. The blister card of claim 1, wherein the first sheet is paper.

3. The blister card of claim 1, wherein the first sheet is a synthetic material.
4. The blister card of claim 1, wherein the second sheet is a synthetic material.
5. The blister card of claim 1, further comprising removal facilitation notches to facilitate the selective removal of the removable portions of the first sheet.
6. The blister card of claim 1, wherein the medicament containing sheet is transparent.
7. The blister card of claim 1, further comprising a tab attached to each removable portion.
8. The blister card of claim 7, further comprising means to facilitate selective removal of the removable portions.
9. The blister card of claim 7, wherein the means is selected from the group consisting of slits and perforations.
10. A child resistant/senior friendly blister card, comprising:
 - (a) a first sheet having a first major surface and a second major surface and a plurality of selectively removable portions, the second major surface provided with a temporary adhesive;
 - (b) a second sheet having a first major surface and a second major surface and provided with a plurality of apertures, the first major surface of the second sheet attached to the second major surface of the first sheet, the second major surface of the second sheet provided with a permanent adhesive;
 - (c) a blister card having a plurality of medicament compartments, each of the plurality of compartments having a closed bottom end and an open top end for receiving a

medicament;

(d) a medicament containment sheet having a first major surface and a second major surface, the second major surface of the containment sheet attached to the blister card and the first major surface of the containment sheet attached to the permanent adhesive on the second major surface of the second sheet; and

(e) wherein the removable portions of the first sheet are in registry with the open top ends of the medicament compartments and also in registry with the apertures in the second sheet, and wherein the temporary adhesive on the second major surface of the first sheet has an adhesive strength that is sufficient to adhere the first sheet to the first major surface of the second sheet and adhere the first sheet to the first major surface of the medicament containment sheet, and an adhesive strength that allows the selectively removable portions in the first sheet to be removed without removing the portions of the medicament containment sheet covering the open top end of the medicament compartment to which the first sheet is attached.

11. The blister card of claim 10, wherein the first sheet is paper.

12. The blister card of claim 10, wherein the first sheet is a synthetic material.

13. The blister card of claim 10, wherein the second sheet is a synthetic material.

14. The blister card of claim 10, further comprising removal facilitation notches to facilitate the selective removal of the removable portions of the first sheet.

15. The blister card of claim 10, wherein the medicament containing sheet is transparent.

16. The blister card of claim 10, further comprising a tab attached to each removable portion.

17. The blister card of claim 16, further comprising means to facilitate selective removal of the removable portions.

18. The blister card of claim 16, wherein the means is selected from the group consisting of slits and perforations.

19. A child resistant/senior friendly blister card, comprising:

(a) a first sheet having a first major surface and a second major surface and a plurality of selectively removable portions, the second major surface provided with a temporary adhesive;

(b) a second sheet having a first major surface and a second major surface and a plurality of removable portions, the first major surface of the second sheet attached to the second major surface of the first sheet, the second major surface of the second sheet provided with a permanent adhesive;

(c) a blister card having a plurality of medicament compartments, each of the plurality of compartments having a closed bottom end and an open top end for receiving a medicament;

(d) a medicament containment sheet having a first major surface and a second major surface, the second major surface of the containment sheet attached to the blister card and the first major surface of the containment sheet attached to the permanent adhesive on the second major surface of the second sheet;

(e) a film material disposed between the first sheet and the second sheet, the film material having a first major surface and a second major surface with the second major surface provided with a temporary adhesive, the first major surface of the film material attached to the second major surface of the first sheet and the second major surface of the

film material attached to the first major surface of the second sheet; and

(f) wherein the removable portions of the first sheet are in registry with the open top ends of the medicament compartments, and wherein the temporary adhesive on the second major surface of the film material has an adhesive strength that is sufficient to adhere the first sheet to the first major surface of the second sheet and an adhesive strength that allows the selectively removable portions of the first sheet to be removed from the second sheet without removing the selectively removable portions of the second sheet to which the first sheet is attached by the film material.

20. The blister card of claim 19, wherein the first sheet is paper.

21. The blister card of claim 19, wherein the first sheet is a synthetic material.

22. The blister card of claim 19, wherein the second sheet is a synthetic material.

23. The blister card of claim 19, further comprising removal facilitation notches to facilitate the selective removal of the removable portions of the first sheet.

24. The blister card of claim 19, wherein the medicament containing sheet is transparent.

25. The blister card of claim 19, further comprising a tab attached to each removable portion.

26. The blister card of claim 25, further comprising means to facilitate selective removal of the removable portions.

27. The blister card of claim 25, wherein the means is selected from the group consisting of slits and perforations.

28. A child resistant/senior friendly blister card, comprising:

(a) a first sheet having a first major surface and a second major surface and a plurality of selectively removable portions, the second major surface provided with a temporary adhesive;

(b) a second sheet having a first major surface and a second major surface and provided with a plurality of apertures, the first major surface of the second sheet attached to the second major surface of the first sheet, the second major surface of the second sheet provided with a permanent adhesive;

(c) a blister card having a plurality of medicament compartments, each of the plurality of compartments having a closed bottom end and an open top end for receiving a medicament;

(d) a medicament containment sheet having a first major surface and a second major surface, the second major surface of the containment sheet attached to the blister card and the first major surface of the containment sheet attached to the permanent adhesive on the second major surface of the second sheet;

(e) a film material disposed between the first sheet and the second sheet, the film material having a first major surface and a second major surface with the second major surface provided with a temporary adhesive, the first major surface of the film material attached to the second major surface of the first sheet, and portions of the second major surface of the film material attached to portions of the first major surface of the second sheet and portions of the second major surface of the film material attached to portions of the first major surface of the medicament containment sheet; and

(e) wherein the removable portions of the first sheet are in registry with the open top ends of the medicament compartments and also in registry with the apertures in the second sheet, and wherein the temporary adhesive on the second major surface of the film material has an adhesive strength

that is sufficient to adhere the first sheet to the first major surface of the second sheet and adhere the first sheet to the first major surface of the medicament containment sheet, and an adhesive strength that allows the selectively removable portions in the first sheet to be removed without removing the portions of the medicament containment sheet covering the open top end of the medicament compartment to which the first sheet is attached.

29. The blister card of claim 28, wherein the first sheet is paper.

30. The blister card of claim 28, wherein the first sheet is a synthetic material.

31. The blister card of claim 28, wherein the second sheet is a synthetic material.

32. The blister card of claim 28, further comprising removal facilitation notches to facilitate the selective removal of the removable portions of the first sheet.

33. The blister card of claim 28, wherein the medicament containing sheet is transparent.

34. The blister card of claim 28, further comprising a tab attached to each removable portion.

35. The blister card of claim 34, further comprising means to facilitate selective removal of the removable portions.

36. The blister card of claim 34, wherein the means is selected from the group consisting of slits and perforations.

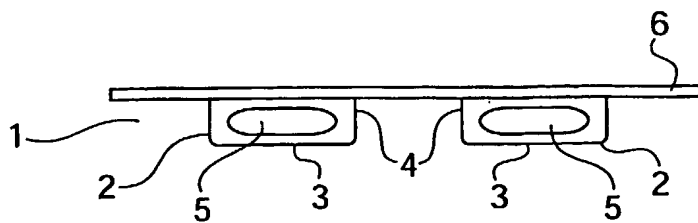


FIG. 1

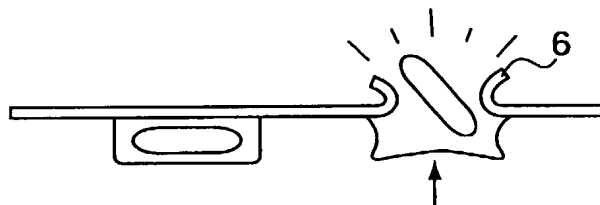


FIG. 2

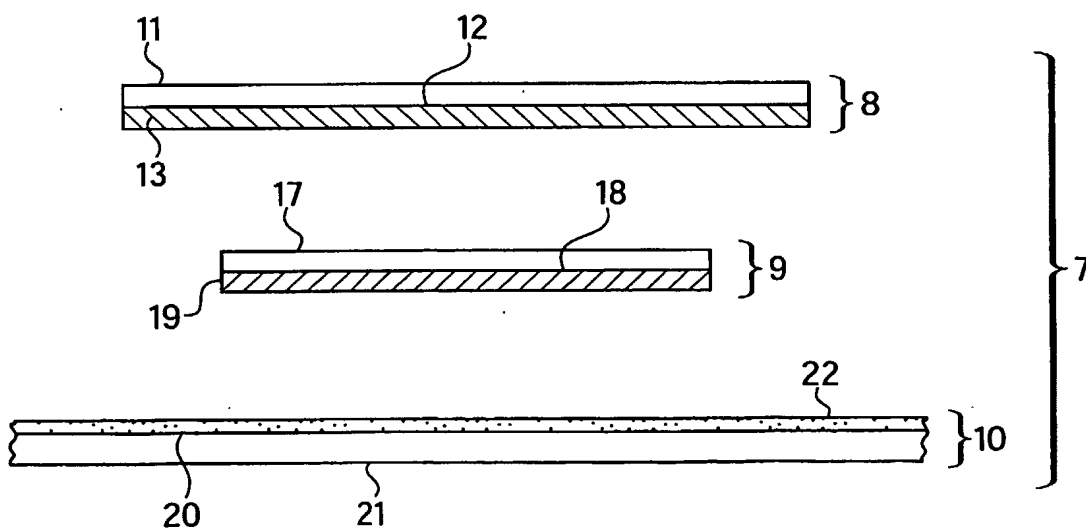


FIG. 3

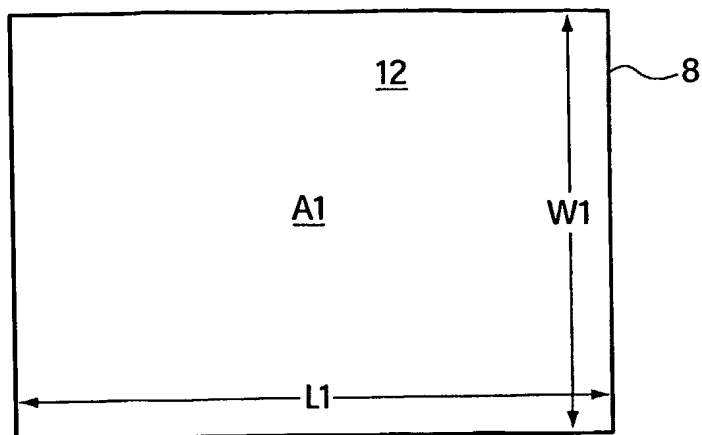


FIG. 4

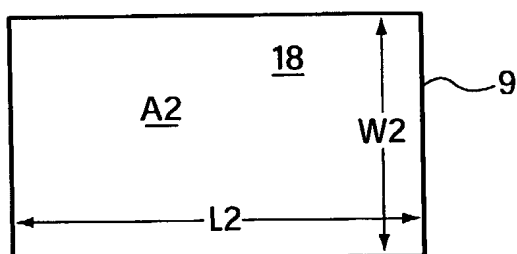


FIG. 5

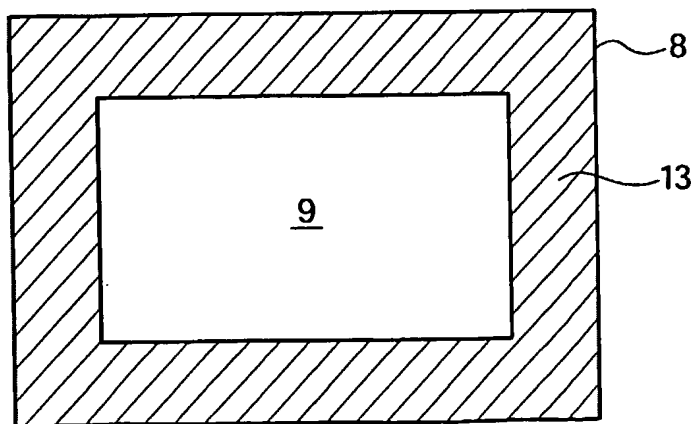


FIG. 6

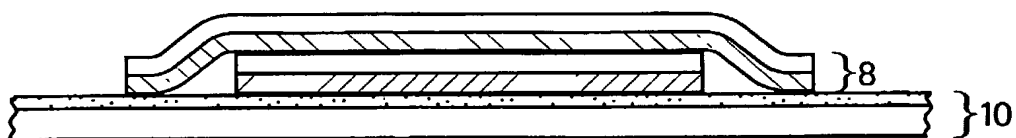


FIG. 7

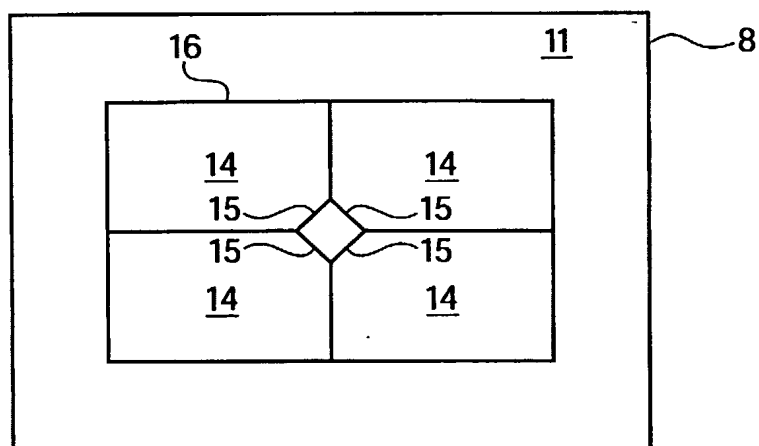


FIG. 8

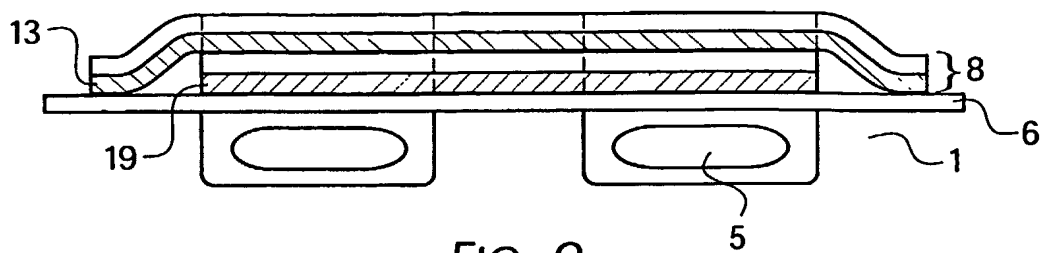


FIG. 9

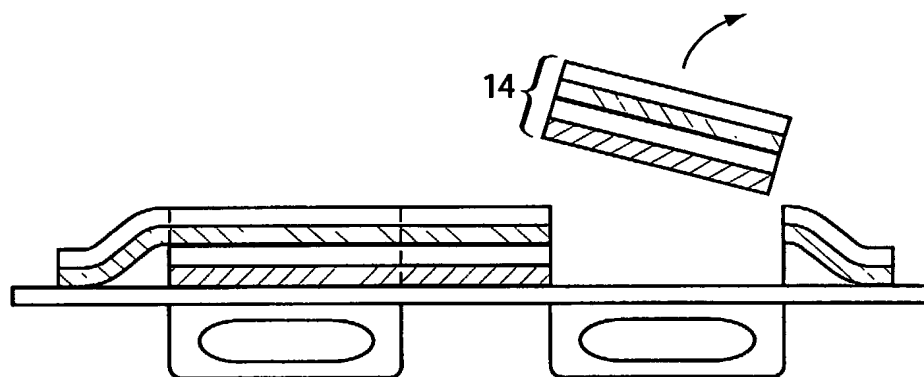


FIG. 10

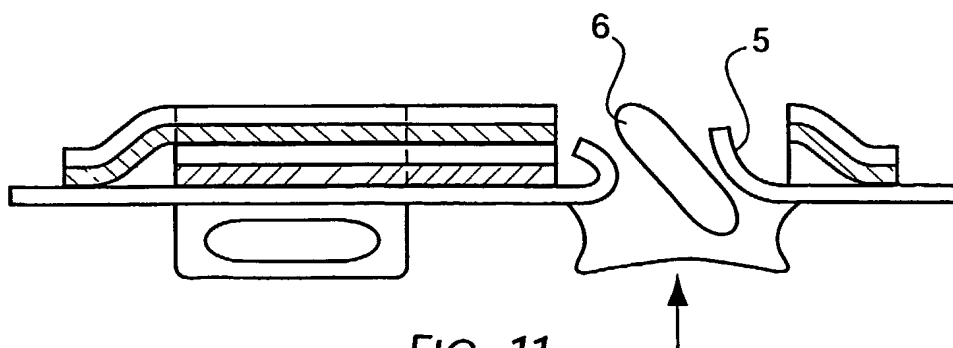


FIG. 11

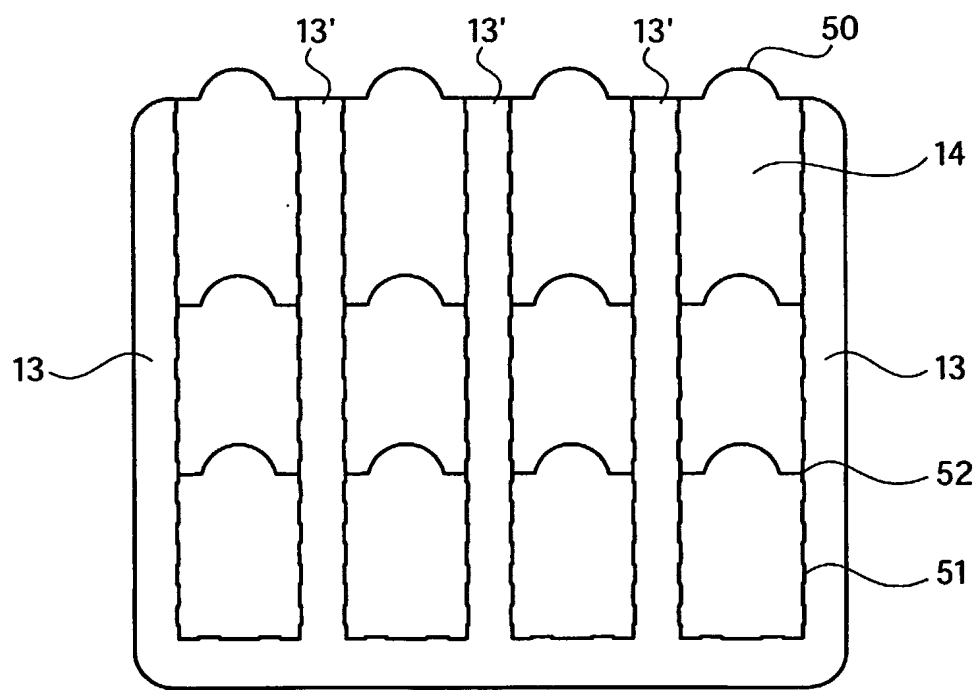


FIG. 12

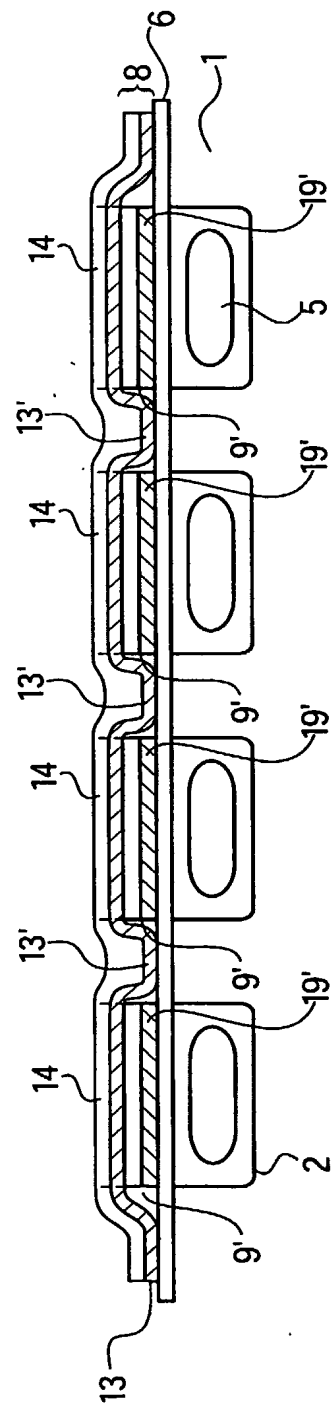


FIG. 13

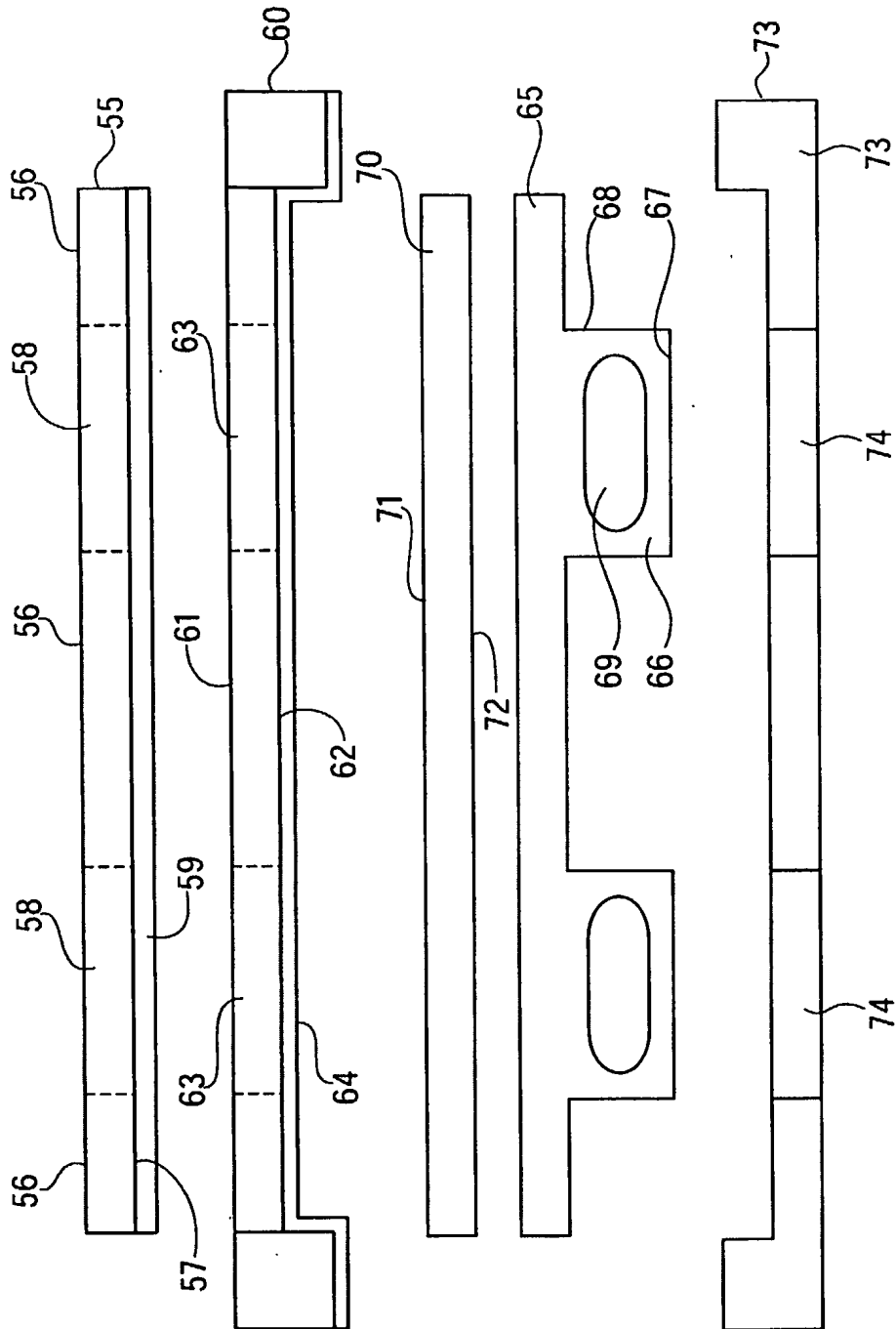
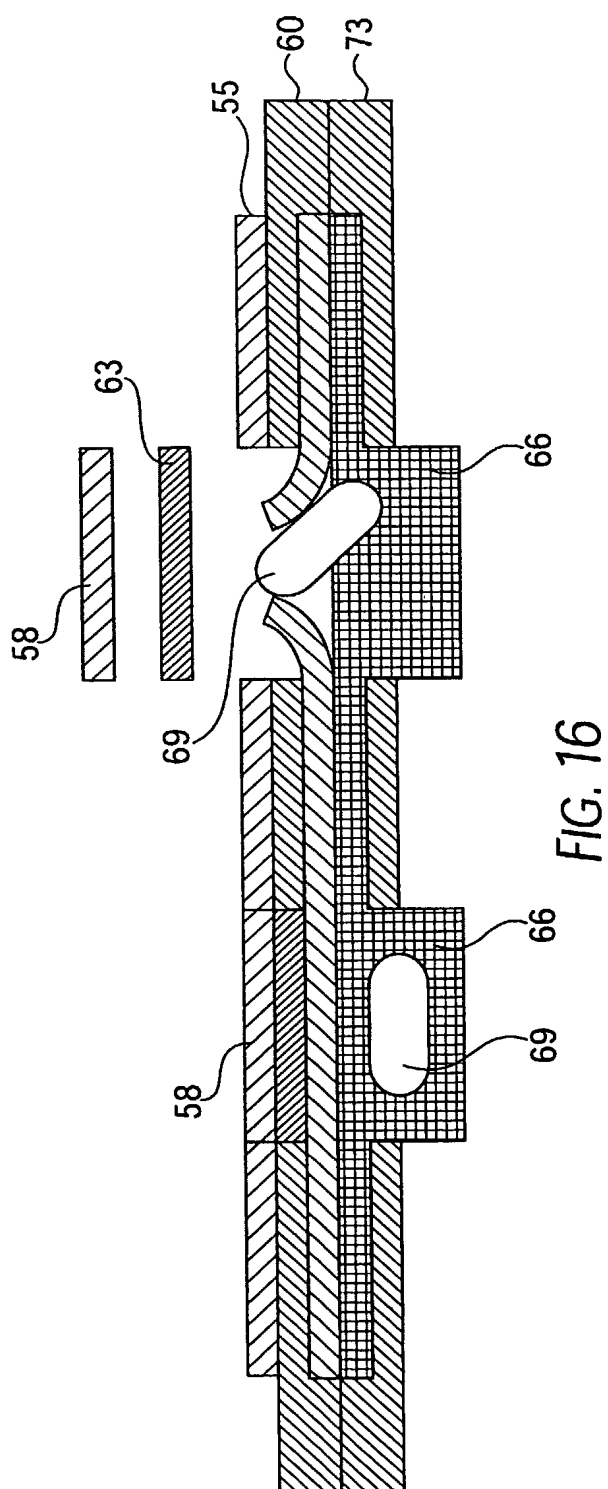
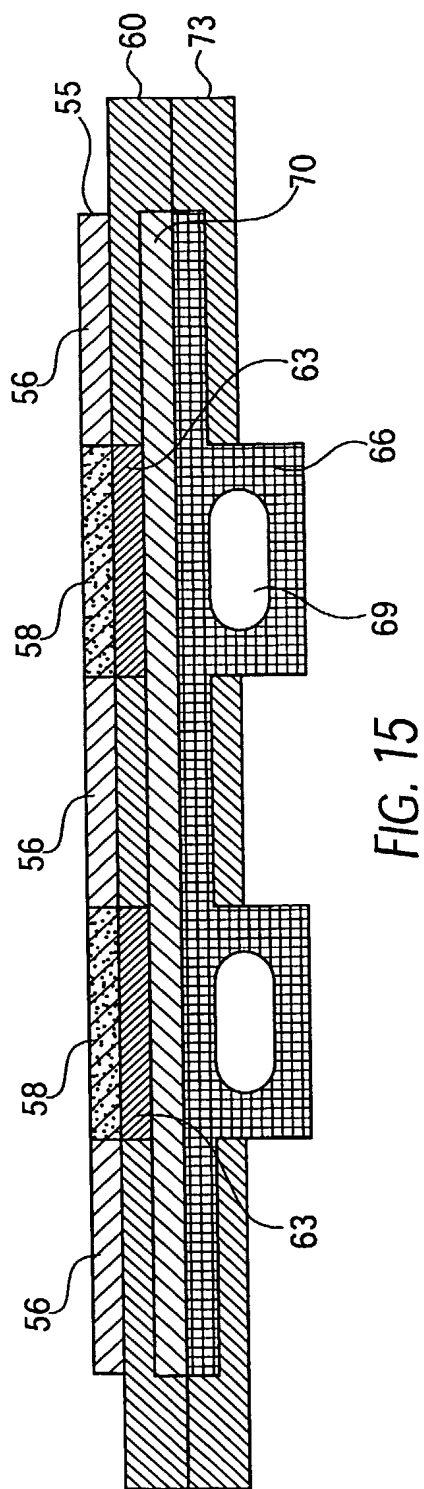


FIG. 14



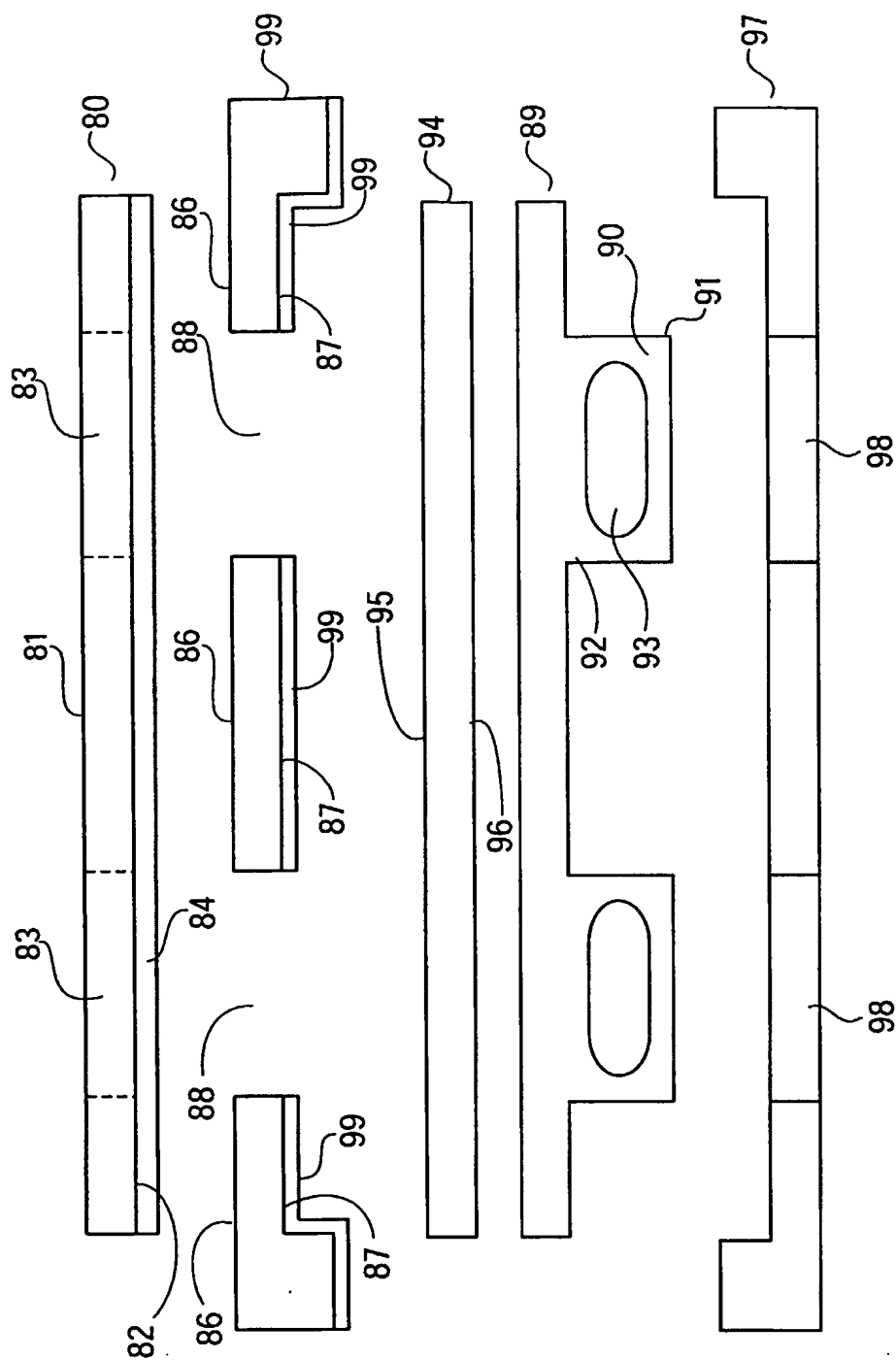
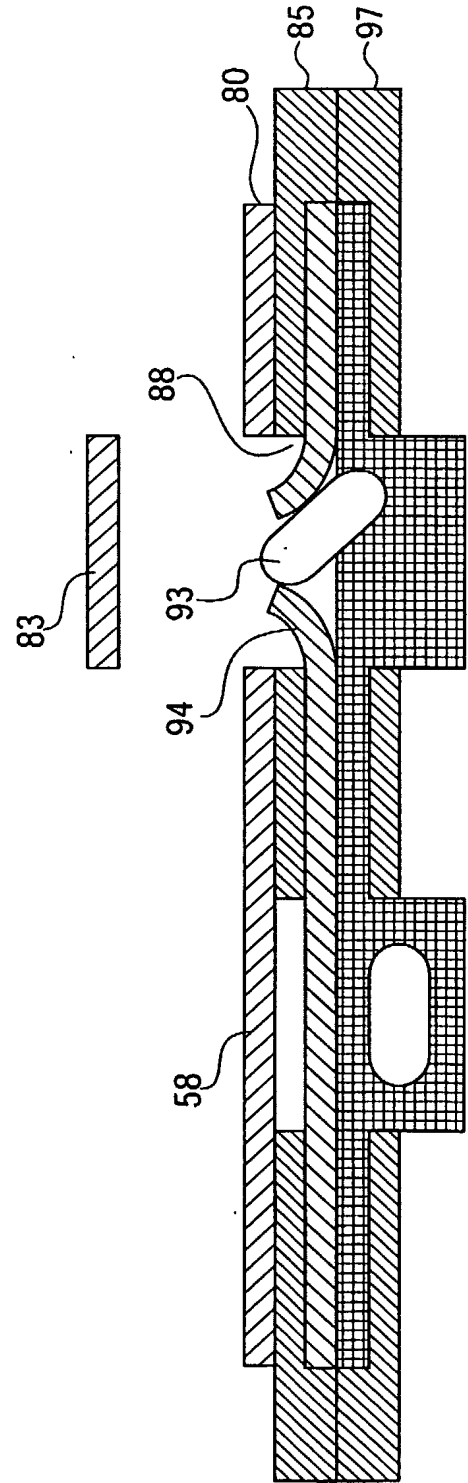
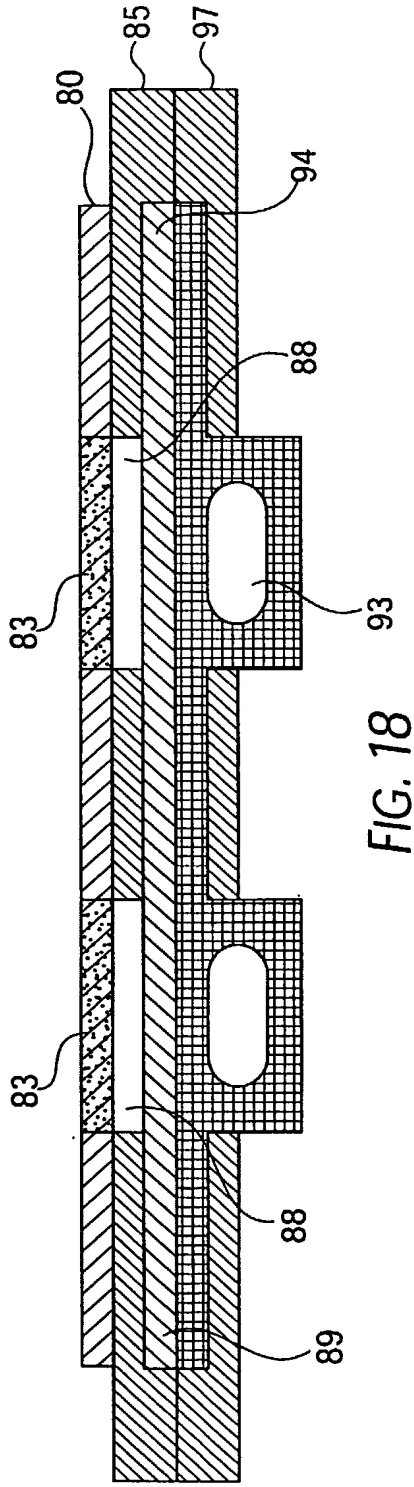


FIG. 17



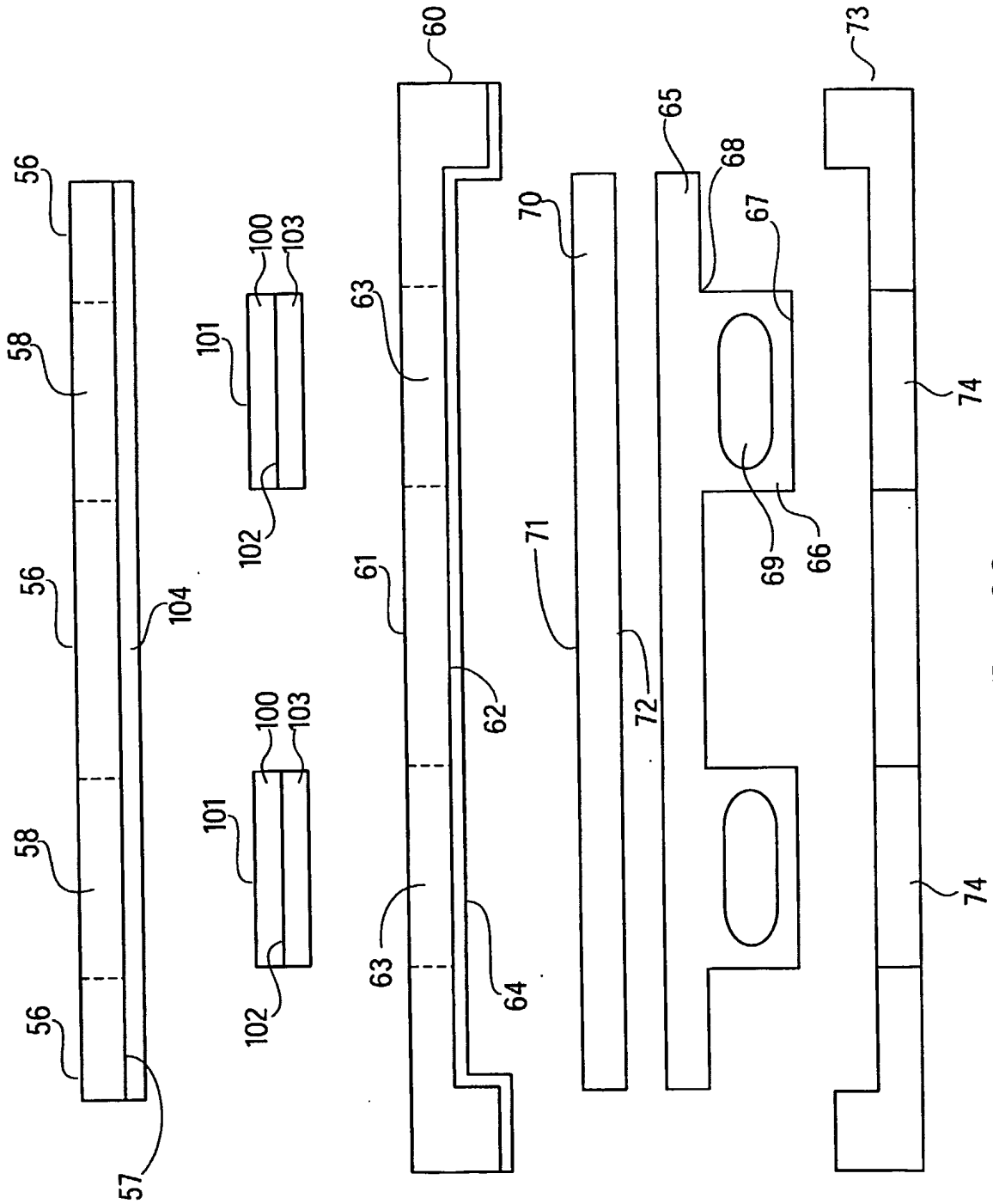


FIG. 20

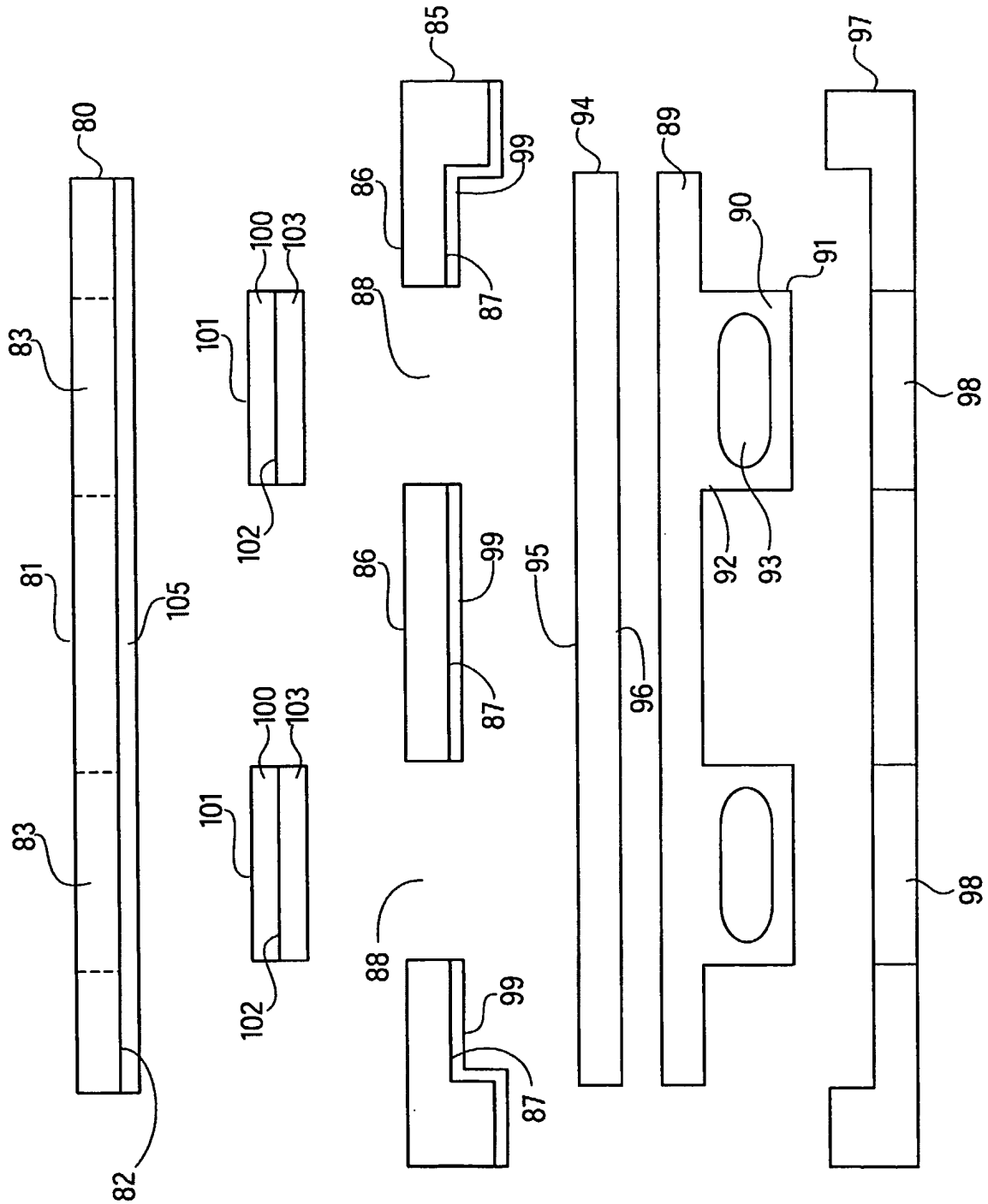
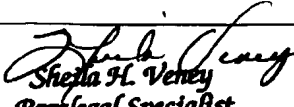


FIG. 21

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/06094

A. CLASSIFICATION OF SUBJECT MATTER IPC(7) : B32B 33/00; B65D 83/04 US CL : 40/638; 206/531, 534; 428/41.8, 41.9, 42.3 According to International Patent Classification (IPC) or to both national classification and IPC																										
B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) U.S. : 40/630, 638; 53/ 411; 206/232, 459.5, 461, 469, 528, 531, 532, 534, 538, 539; 428/40.1, 41.7- 41.9, 42.2, 42.3 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched NONE Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) NONE																										
C. DOCUMENTS CONSIDERED TO BE RELEVANT <table border="1"> <thead> <tr> <th>Category *</th> <th>Citation of document, with indication, where appropriate, of the relevant passages</th> <th>Relevant to claim No.</th> </tr> </thead> <tbody> <tr> <td>A ✓</td> <td>US 3,835,995 A (HAINES) 17 September 1974.</td> <td>1-36</td> </tr> <tr> <td>A ←</td> <td>US 3,899,080 A (BRUNDA) 12 August 1975.</td> <td>1-36</td> </tr> <tr> <td>A —</td> <td>US 4,158,411 A (HALL et al) 19 June 1979.</td> <td>1-36</td> </tr> <tr> <td>A <</td> <td>US 4,211,329 A (BRAVERMAN) 08 July 1980.</td> <td>1-36</td> </tr> <tr> <td>A —</td> <td>US 5,014,851 A (WICK) 14 May 1991.</td> <td>1-36</td> </tr> <tr> <td>A —</td> <td>US 6,006,913 A (LUDEMANN et al) 28 December 1999.</td> <td>1-36</td> </tr> <tr> <td>A —</td> <td>US 6,155,423 A (KATZNER et al) 05 December 2000.</td> <td>1-36</td> </tr> </tbody> </table>			Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.	A ✓	US 3,835,995 A (HAINES) 17 September 1974.	1-36	A ←	US 3,899,080 A (BRUNDA) 12 August 1975.	1-36	A —	US 4,158,411 A (HALL et al) 19 June 1979.	1-36	A <	US 4,211,329 A (BRAVERMAN) 08 July 1980.	1-36	A —	US 5,014,851 A (WICK) 14 May 1991.	1-36	A —	US 6,006,913 A (LUDEMANN et al) 28 December 1999.	1-36	A —	US 6,155,423 A (KATZNER et al) 05 December 2000.	1-36
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.																								
A ✓	US 3,835,995 A (HAINES) 17 September 1974.	1-36																								
A ←	US 3,899,080 A (BRUNDA) 12 August 1975.	1-36																								
A —	US 4,158,411 A (HALL et al) 19 June 1979.	1-36																								
A <	US 4,211,329 A (BRAVERMAN) 08 July 1980.	1-36																								
A —	US 5,014,851 A (WICK) 14 May 1991.	1-36																								
A —	US 6,006,913 A (LUDEMANN et al) 28 December 1999.	1-36																								
A —	US 6,155,423 A (KATZNER et al) 05 December 2000.	1-36																								
<input type="checkbox"/> Further documents are listed in the continuation of Box C. <input type="checkbox"/> See patent family annex.																										
<table border="0"> <tr> <td> * Special categories of cited documents: "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier application or patent published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed </td> <td> "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art "&" document member of the same patent family </td> </tr> </table>			* Special categories of cited documents: "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier application or patent published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art "&" document member of the same patent family																						
* Special categories of cited documents: "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier application or patent published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art "&" document member of the same patent family																									
Date of the actual completion of the international search 06 May 2003 (06.05.2003)		Date of mailing of the international search report 20 MAY 2003																								
Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (703)305-3230		Authorized officer Jimmy G Foster Telephone No. (703) 308-1148  Sheila H. Veney Paralegal Specialist Tech. Center 3700																								